WHAT IS CLAIMED IS:

1. A bus communication system including a host device managing a bus, a plurality of line concentrators located on lower tier with respect to said host device for transferring communication with said host device, and a bus device connected to a port of one of said line concentrators or to a port of said host device, as a destination of connection, said bus device operating and communicating with the destination of connection, wherein said line concentrators and said bus device operate under a Universal Serial Bus (USB) standard;

each of said line concentrators comprising:

a first functional block constructing a virtual port with respect to a port physically provided to said line concentrator and connecting said bus device to said virtual port; and

a second functional block for performing a proxy response and a setting to the communication transferred to said bus device connected to the virtual port;

one of said line concentrators having a port connected to another one of said concentrators which has a port connected to said bus device, each of said line concentrators establishing a function of said first and second functional blocks in accordance with a connection of said line concentrator and said bus device.

2. The system in accordance with claim 1, wherein the second functional block comprises:

a response functional block operating as if said bus device is connected to said virtual port, said response functional block responding to the communication from said host device to take a place of said bus device; and

a bus setting functional block setting a bus connection to said bus device.

3. The system in accordance with claim 1, wherein said host device operates under a USB-OTG (USB-On-The-Go) standard, and

includes:

a transfer functional block having another device of the USB-OTG standard arranged on an upstream side of said host device, said transfer functional block arbitrating the communication from said other bus device to a device of the USB standard connected in a lower layer with respect to said host device; and

a proxy response functional block for making a response from said device of the USB standard by deputy.

4. The system in accordance with claim 2, wherein said host device operates under the USB-OTG standard, and includes:

a transfer functional block having another device of the USB-OTG standard arranged on an upstream side of said host device, said transfer functional block arbitrating the communication from said other device to a device of the USB standard connected in a lower layer with respect to said host device; and

a proxy response functional block for making a response from said device of the USB standard by deputy.

5. The system in accordance with claim 3, wherein said host device includes a memory circuit for storing data transferred from said other device to said device of the USB standard.

6. The system in accordance with claim 4, wherein said host device includes a memory circuit for storing data transferred from said other device to said device of the USB standard.

7. A line concentrator arranged in a lower tier with respect to a host device managing a bus and transferring communication with said host device, comprising:

a first functional block operating under a Universal Serial Bus (USB) standard and constructing a virtual port with respect to a port physically provided to said line concentrator and connected a bus device to the virtual port; and

a second functional block operating for performing a response and a setting for the communication transferred to a device connected to the virtual port to take a place of said bus device,

said line concentrators having a port connected to another concentrator having a port connected to said bus device, each of said line concentrators establishing a function of said first and second functional blocks in accordance with a connection of said line concentrator with said bus device.

8. The line concentrator in accordance with claim 7, wherein the second functional block comprises:

a response functional block operating as if said device is connected to the virtual port, said response functional block responding to the communication from said host device to take the place of said bus device; and

a bus setting functional block setting a bus connection to said bus device.

9. A host device for managing a bus under a Universal Serial Bus-On-The-Go (USB-OTG) standard, comprising:

a transfer functional block having another device of the USB-OTG standard arranged on an upstream side of said host device, said transfer functional block arbitrating communication from said other bus device to a device of the USB standard connected in a lower layer with respect to said host device; and

a proxy response functional block making a proxy response from said bus device of the USB standard.

10. The host device in accordance with claim 9, further comprising a functional block for constructing a virtual port in distinction from a physical port,

said functional block being in operation responsive to a connection topology in which a first bus device for transferring data supplied to said host device is connected to said functional

block and a second device is connected to said first bus device.

11. The host device in accordance with claim 9, further comprising a memory circuit for storing data transferred from said other device to said device of the USB standard.

12. The host device in accordance with claim 10, further comprising a memory circuit for storing data transferred from said other device to said device of the USB standard.

13. A method controlling communication over a bus communication system in which a plurality of line concentrators, each having line concentrating and switching functions, are connected to a host device, and are operated under a Universal Serial Bus (USB) standard, comprising:

a first step of constructing a virtual port in one line concentrator when another line concentrator is connected to a physical port provided to said one line concentrator and a bus device is connected to said other line concentrator;

a second step of setting an operation as if said bus device is connected to the virtual port;

a third step of causing, in setting a bus connection by said host device, said one line concentrator to respond to communication associated with the setting of the bus connection from said host device to said bus device to take a place of said bus device; and

a fourth step of setting the bus connection by communication with said one line concentrator responsive to the response.

14. The method in accordance with claim 13, further comprising:

a fifth step of transferring, subsequently to said fourth step, data from said host device to said device;

a sixth step of detecting the transferred data by said

one line concentrator and responding to said host device, upon detection of the transferred data, to take the place of said bus device; and

a seventh step of transferring the transferred data to said bus device by said one line concentrator.

15. The method in accordance with claim 13, wherein in said fourth step, said one line concentrator acts in deputy for said bus device in making the response, while performing a first processing of transferring data from said host device in the setting of the bus connection by control transfer and determining a form of transfer in terms of scheduling of said host device as a unit, a second processing of read-out transferring of the data based on said unit, and a third processing of write-in transferring of the data based on said unit.

16. The method in accordance with claim 14, wherein, in said fourth step, said one line concentrator acts in deputy for said bus device in making the response, while performing a first processing of transferring data from said host device in the setting of the bus connection by control transfer and determining a form of transfer in terms of scheduling of said host device as a unit, a second processing of read-out transferring of the data based on said unit, and a third processing of write-in transferring of the data based on said unit.

17. The method in accordance with claim 14, wherein, in said sixth step, in response to detection of the transferred data by a connection device, the detected data are temporarily stored; and

in said seventh step, the stored data are transferred to said bus device of a second network.

18. The method in accordance with claim 16, wherein, in

said sixth step, in response to detection of the transferred data by a connection device, the detected data are temporarily stored; and

in said seventh step, the stored data are transferred to said bus device of a second network.

19. The method in accordance with claim 17, wherein the number of tiers of connection to said host device is equal to or more than seven based on construction of the virtual port in said one line concentrator.

20. The method in accordance with claim 18, wherein the number of tiers of connection to said host device is equal to or more than seven based on construction of the virtual port in said one line concentrator.

21. A method controlling communication over a network system including a first network formed by a device satisfying a Universal Serial Bus-On-The-Go (USB-OTG) standard, said device of the USB-OTG standard forming said first network being a connection device, and a second network formed by connecting a line concentrator, having a transferring and line-concentrating function and operating on a USB standard, to a port of said connection device and by connecting a device of the USB standard to a port of said line concentrator, said second network being connected to said first network, said method comprising:

a first step of determining a state of connection and constructing a virtual port distinct from a physical port actually provided to said connection device, subject to a condition that said connection device is located simply as a device;

a second step of setting said device of the USB standard connected to a port of said line concentrator by a function of said connection device in setting an operation as if said device of the USB standard is connected to the virtual port;

a third step of detecting data transferred to said device of the USB standard by said connection device, transferring the data to said device of the USB standard responsive to the detection, and responding in proxy for said device of the USB standard; and

a fourth step transferring the data from said connection device to said device of the USB standard subsequent to the response.

22. The method in accordance with claim 21, wherein said data transferred in said fourth step are associated with bus connection setting.

23. The method in accordance with claim 21, wherein if said connection device is a slave, said third and fourth steps are executed, and if said connection device is a master, said third step is executed and said fourth step is omitted.

24. The method in accordance with claim 22, wherein if said connection device is a slave, said third and fourth steps are executed, and if said connection device is a master, said third step is executed and said fourth step is omitted.

25. The method in accordance with claim 21, further comprising:

a fifth step of transferring, subsequent to said fourth step, data from a device corresponding to a master of the first network to said device of the second network;

a sixth step of detecting the transferred data by said connection device and making a response to the device corresponding to the master, responsive to the detection, in deputy for said device of the second network; and

a seventh step of transferring the transferred data from said connection device to said device of the second network subsequent to the proxy.

26. The method in accordance with claim 22, further comprising:

a fifth step of transferring, subsequent to said fourth step, data from a device corresponding to a master of the first network to said device of the second network;

a sixth step of detecting the transferred data by said connection device and making a response to the device corresponding to the master, responsive to the detection, in deputy for said device of the second network; and

a seventh step of transferring the transferred data from said connection device to said device of the second network subsequent to the deputy.

27. The method in accordance with claim 23, further comprising:

a fifth step of transferring, subsequent to said fourth step, data from a device corresponding to a master of the first network to said device of the second network;

a sixth step of detecting the transferred data by said connection device and making a response to the device corresponding to the master, responsive to the detection, in deputy for said device of the second network; and

a seventh step of transferring the transferred data from said connection device to said device of the second network subsequent to the deputy.

28. The method in accordance with claim 25, wherein in said sixth step, in response to detection of the transferred data by a connection device, the detected data are temporarily stored; and

in said seventh step, the stored data are transferred to said bus device of the second network.

29. The method in accordance with claim 26, wherein in

said sixth step, in response to detection of the transferred data by a connection device, the detected data are temporarily stored; and

in said seventh step, the stored data are transferred to said bus device of the second network.

30. The method in accordance with claim 27, wherein in said sixth step, in response to detection of the transferred data by a connection device, the detected data are temporarily stored; and

in said seventh step, the stored data are transferred to said bus device of the second network.

31. The method in accordance with claim 28, wherein when said connection device is a slave, the number of tiers of connection by said line concentrator to said host device in the first network is equal to or more than six.

32. The method in accordance with claim 29, wherein when said connection device is a slave, the number of tiers of connection by said line concentrator to said host device in the first network is equal to or more than six.

33. The method in accordance with claim 30, wherein when said connection device is a slave, the number of tiers of connection by said line concentrator to said host device in the first network is equal to or more than six.

34. The method in accordance with claim 31, wherein when said connection device is a slave, the number of tiers of connection by said line concentrator to said host device is set to five or more, based on construction and connection of the virtual port and a proxy response function; and

when said connection device is a master, the number of

tiers of connection by said line concentrator to said host device is set to five or more, based on the construction and connection of the virtual port.

35. The method in accordance with claim 32, wherein when said connection device is a slave, the number of tiers of connection by said line concentrator to said host device is set to five or more, based on construction and connection of the virtual port and a proxy response function; and

when said connection device is a master, the number of tiers of connection by said line concentrator to said host device is set to five or more, based on the construction and connection of the virtual port.

36. The method in accordance with claim 33, wherein when said connection device is a slave, the number of tiers of connection by said line concentrator to said host device is set to five or more, based on construction and connection of the virtual port and a proxy response function; and

when said connection device is a master, the number of tiers of connection by said line concentrator to said host device is set to five or more, based on the construction and connection of the virtual port.